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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,135	03/11/2004	Joseph S. Cavallo	10559-707002	8491
20985	7590	02/21/2007		
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER PATEL, HETUL B	
			ART UNIT	PAPER NUMBER
			2186	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/799,135

Applicant(s)

CAVALLO ET AL.

Examiner

Hetul Patel

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to the communication filed on 02/02/2007.
2. Applicant's request for reconsideration of the finality of the rejection of the Office action mailed on 11/03/2006 is persuasive and, therefore, the finality of that action is withdrawn. As a result of that, the after-final amendment filed on 12/21/2006 has been entered and carefully considered. Claim 1 is amended; and none of the claims are cancelled or newly added. Therefore, claims 1-29 are pending in this application.
3. Applicant's arguments filed on 12/21/2006 have been considered but are moot in view of the new ground(s) of rejection.

### ***Specification***

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The examiner believes that the title of the invention is broad. A descriptive title indicative of the invention will help in proper indexing, classifying, searching, etc. See MPEP 606.01. However, the title of the invention should be limited to 500 characters.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-29 are rejected under 35 U.S.C. 101 because the language of the claim raises a questions as to whether the claim is directed merely to an abstract idea that is

not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 USC 101.

There is no tangible (real world) result found due to the mere "determining" steps in combination in claim 1 and, equivalently, the mere "determining" functionality of the machine operations as would be controlled by (i) the instructions in claim 12 and (ii) functions/processing steps in claim 22. In addition, it appears that the second step/operation/function only occurs upon satisfying the previous "if it does" condition. Upon failure to satisfy that condition, these claims include only the first recited step (claim 1) or operation (claim 12), or function (claim 22) which, of course, by itself, also fails to cause the respective claim to provide a tangible result. The same arguments also applies to the dependent claims 2-8, 13-18 and 23-29. In short, none of claims 1-8, 12-18 and 22-29 produce a useful, concrete and tangible result. And furthermore, determining, defining, setting, indicating and tracking steps, in or of itself, is not a useful result. To render a tangible result, the steps of determining must be followed by at least one other step producing a tangible result. For example, a step of storing the result of determination, or displaying the result of determination or using the result of determination in such fashion might produce a tangible result.

Furthermore, even though dependent claims 9 and 19 produce a concrete and tangible result by having a step/operation of storing the tracking address, they do not satisfy the usefulness requirement. In other words, claims 9 and 19 satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world"

value. However, the mere fact that the claim may satisfy the utility requirement of 35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application.

Claims 10-12 and 20-21 are also rejected as they depend upon the rejected base claims 9 and 19, respectively.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
7. Claims 1-29 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: steps if the first data transfer request does not cross a boundary address associated with an address space.

### ***Response to Arguments***

8. In the remarks submitted on 12/21/2006 Applicant asserted that:
  - (a) The claim 1 is amended to clarify how the recited subject matter produces a useful, concrete and tangible result.

- (b) In claim 12, the claimed functionality provided by the machine-executable instructions that are stored on a machine-readable medium represents an article as recited in *Beauregard* format, which is a format that has been deemed sufficiently tangible to be considered statutory. *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995).
- (c) In claim 22, the claimed apparatus represents statutory subject matter. Not only there is no question as to whether the claim is directed merely to an abstract idea, but the claimed apparatus is in a class of invention specially prescribed by 35 USC 101. For example, even in *In re Warmerdam*, in which the court held that claims 1-4 and 6 were directed to non-statutory subject matter, claim 5 was clearly directed to statutory subject matter, even though it depends on claims 1-4, because it was directed to a machine.

Examiner respectfully traverses Applicant's remark for the following reasons:

With respect to (a), even though the claim 1 as amended on 12/21/2006 does produces a useful, concrete and tangible result if the first data transfer request does cross a boundary address associated with an address space. The claim 1 and its dependent claims are not complete as they fail to particularly point out (i.e. it left unclear and unexplained on) what happens if the first data transfer request does not cross a boundary address associated with an address space. Furthermore, Examiner would like to suggest Applicant to amend the claim 1 by indicating/specifying some storage medium where the data, identified by the first data transfer request, is being transferred.

With respect to (b), Examiner agreed that according to *In re Beauregard* case, the article of the claim 12, represented by the machine-executable instructions that are stored on a machine-readable medium, is tangible. However, the instructions do not produce a *tangible* result as required by 35 USC 101. Furthermore, the claim 12 and its dependent claims are not complete as they fail to particularly point out (i.e. it left unclear and unexplained on) what happens if the first data transfer request does not cross a boundary address associated with an address space.

With respect to (c), Examiner agreed that according to *In re Warmerdam* case, the apparatus of the claim 22, having an input/output device (which is a hardware) and a computer processing device (which can be a hardware or software), is tangible. However, the steps/functions processed by the computer processing device do not produce a *tangible* result as required by 35 USC 101. Furthermore, the claim 22 and its dependent claims are not complete as they fail to particularly point out (i.e. it left unclear and unexplained on) what happens if the first data transfer request does not cross a boundary address associated with an address space.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hetul Patel whose telephone number is 571-272-4184. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*H.B. Patel* 02/13/2007  
Hetul Patel  
Patent Examiner  
Art Unit 2186